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The Consumer Education Website Guide series aims to help state and territory staff develop effective, accessible, family-friendly consumer education websites. This series is designed to support the efforts of states and territories as they enhance their consumer education websites to help families understand the full range of child care options and resources available to them.

These guides share best practices and tips that state and territory staff can use to improve the user experience, make all information clear, and prepare for common accessibility barriers—such as limited English proficiency, limited literacy skills, and disability. They will help to ensure that all families have easy access to accurate, understandable information as child care consumers.

This guide offers best practices, strategies, and examples for state and territory staff to consider as they work to ensure their consumer education websites are accessible to people with disabilities. States and territories need to consider their capabilities and budgets to make decisions that allow the widest possible access to their consumer education websites.

Introduction

Building accessible consumer education websites allows all users, regardless of ability, to access important information about child care and family resources. The federal government recognizes the importance of providing accessible consumer education materials. Under the Child Care and Development Fund, federal regulations require states and territories to maintain "a consumer-friendly and easily accessible website that ensures the widest possible access to services for families who speak languages other than English and persons with disabilities."

People with disabilities face unique challenges when using websites that are not fully accessible to them. States and territories should understand how their consumer education website's design might affect how someone with a disability can access information. The following list details how people with disabilities may access information differently.

Low vision, color blind, and blind: People with low or no vision often use screen reader applications that convert text information into synthesized speech. Users with low vision may not be able to distinguish between text and background easily or read small font. Color blind users may see dissimilar colors on the page as similar.

Hearing loss, hard of hearing, and deaf: Users who are hard of hearing or deaf will need to use closed captions to access audio files or audio materials in videos. Consider choosing audio or video files that use plain versus complex language.

Motor disabilities: Users with a motor disability might not use the computer mouse as their pointing device. Many use only keyboard strokes or alternative input devices altogether. Users with motor disabilities need to be able to easily access various elements on the page without using the mouse.

Intellectual or cognitive disabilities and dyslexia: Users with intellectual or cognitive disabilities may have difficulty with large amounts of text on a page. They may need to access the information using short paragraphs, bullets, succinct images, and charts. They often digest information better if it's provided in other formats, such as audio or video. Users who are on the autism spectrum may prefer a quiet layout, calm colors, plain language, and descriptive calls to action.

Why Accessibility?

Designing accessible websites is important for the following reasons:

Accessibility Gives Everyone Equal Access to the Web

Accessible websites and web applications ensure equal access to the Internet for everyone, regardless of age, ability, intellectual development, health, or mobility.

It Is the Law

More than 40 countries worldwide have laws in place that protect against discrimination in digital accessibility. The U.S. alone has several laws ensuring and protecting equal access to digital and nondigital resources. Section 508 of the U.S. Rehabilitation Act of 1973 (revised several times) is the most well-known law that ensures that all government websites are accessible to individuals with disabilities.

Accessibility Is Usability

In this context, accessibility means that all people—regardless of any differences in ability—can use a website. Usability means that the design and implementation of websites are effective and efficient. Accessibility and usability are two different things, but the idea that an accessible website is a more usable website is true. Accessibility is one component of usability, and many of the guidelines that ensure accessible design contribute to higher usability of a website overall.

The following section details ways for states and territories to improve the accessibility of their consumer education websites. By carefully considering images, the use of plain language, and how to display data and other content, states and territories can enhance the accessibility of their consumer education websites.

Top 10 Accessibility Practices

Images

Guideline	Explanation	Instead of Using This	Do This
Use alternate text (alt tags) for all images	Without alt tags, people with low or no vision do not have access to information conveyed by an image.	Images that rely on the user's sight as the only vehicle for conveying content and meaning	Provide descriptive alternative text or alt attributes. For example, an image of Abraham Lincoln's statue with an alt tag: enables screen readers to convey the contents of the image. Conversely, decorative images should have empty alt text (alt= "") so that screen readers skip them.

Guideline	Explanation	Instead of Using This	Do This
Do not use images as text	Text in an image is unreadable to people with low or no vision.	Text or instructions in an image	Use only text to convey content, especially critical information like a call to action or link to a next step.
Use images judiciously	The Internet is a visual medium, but that doesn't mean you need to pile on images. An image-heavy page takes a long time to download, creates visual overload and confusion, and is unmanageable to automated screen readers.	Too many images that create visual clutter, that are unreadable by people with low or no vision, and are unnavigable by people who use keyboard actions	Use images sparingly, only to illustrate content and balance the visual ratio of text to images.

Content

Guideline	Explanation	Instead of Using This	Do This
Use headings correctly and create hierarchy	Header tags, <h1> through <h6>, should be used in the proper order and contain keywords.</h6></h1>	Erratic headers and incorrect nesting are shown below: • <h1>Favorite Desserts</h1> • Some introductory text • <h4>Ice Cream</h4> • Text about ice cream • <h4>Chocolate</h4> • Text about chocolate ice cream • <h4>Vanilla</h4> • Text about vanilla ice cream	Use headings to create correct hierarchy of information: • <h1>Favorite Desserts</h1> • Some introductory text • <h2>Ice Cream</h2> • Text about ice cream • <h3>Chocolate</h3> • Text about chocolate ice cream • <h3>Vanilla</h3> • Text about vanilla ice cream

Guideline	Explanation	Instead of Using This	Do This
Ensure all content is easily accessible using the keyboard	Users with motor disabilities may not be able to use a mouse and instead might rely on the Tab and arrow keys (among others) on their keyboard or alternative devices for navigation and action.	Long lists of links, extensive navigation, complex content, and no shortcuts that force the user to go through lengthy, linear text to access subsequent sections on the page	Create distinct sections of the page and identify them with "ID" names; provide anchor links that allow users to skip quickly to the desired section; provide clear links at the top of the page; provide a "skip to main content" link; simplify navigation; provide the smallest number of links needed to interact. See figure 1 for an example of a simplified navigation structure.
Distinguish between foreground and background colors	Make sure your content is easy to read by clearly distinguishing between text and background.	Similar colors for text and background	Ensure at least a 4.5 to 1 ratio between foreground text and background colors. Use web-based tools such as WebAIM's Color Contrast Checker to ensure your foreground color choice is distinct from the background.
Provide the option to resize text	Give users the ability to zoom in or enlarge text.	Small, fixed font size that makes it difficult for low-vision users to access content	Allow users to increase, decrease, and reset the font size. Other websites allow users to change the font to one they find more readable. A good practice is to ensure that the font is not a fixed size; use percentages instead when defining font size.

Guideline	Explanation	Instead of Using This	Do This
Be screen reader friendly	Screen readers are applications that convert text into synthesized speech and are widely used by Internet users with low or no vision.	Complex pages where information is conveyed in a non-linear fashion	Use the "lang" tag to identify the language your text is in; identify distinct sections with proper headings to allow quick navigation; provide "skip navigation" links; use proper, well-formed HTML; use Accessible Rich Internet Applications (ARIA) for custom interactions and widgets where HTML is not sufficient. ARIA supplements HTML and helps developers make custom web applications accessible to screen readers when there is no other mechanism.

FOR PROGRAMS THE RATINGS PROCESS BECOME A LEVEL 1 PROGRAM ADVANCE TO LEVEL 2 REACH LEVELS 3-5 COMMUNICATE YOUR RATING PROGRAM RESOURCES FAQ'S

PROGRAM FREQUENTLY ASKED QUESTIONS

- Who can help me navigate the assessment and quality improvement process?
- Is there a list of the documentation necessary to complete my rating?
- What other resources are there to support child care programs in my community?
- Why is Colorado Shines important if my program already has a waitlist?
- What programs qualify for alternative pathway?
- 6 How does a program earn Quality Improvement funds through Colorado Shines?
- How do I become a Colorado Child Care Assistance Program (CCCAP) Provider?
- Can a program appeal a rating that we disagree with?

Figure 1. The navigation menu for https://www.coloradoshines.com/ has two levels of navigation: a top-level menu on the left and a sub-menu level in the main area. Users navigate links using the Tab key and select desired links using the Enter key.

Language

Guideline	Explanation	Instead of Using This	Do This
Use plain language	Write for your audience in a way they can understand and that helps them find the information they need.	Complex prose using long sentences and metaphorical or intricate language	Write at a level that is appropriate for your audience; explain your ideas in simple language; use short sentences; use concrete language; anticipate what questions your audience would have and make sure to answer them; use active voice and present tense. For more information, visit PlainLanguage.gov, and see the HHS.gov "Write in Plain Language" guide.
Less is more	Be concise.	Lengthy blocks of text that take long to read and provide unnecessary details	Provide users with just enough text to get the most important points across; use short paragraphs; use bullets and lists to convey main ideas; break your text into sections with descriptive headings; use white space to break up text; eliminate unnecessary text. See figure 2 for an example of providing just enough information.

GREAT START TO QUALITY

Great Start to Quality helps families find the best early learning programs for their children and helps providers improve the care they give to children.

Great Start to Quality Resource Centers can help find licensed child care programs, share information to help with costs, and offer lending libraries to use with your child.

FIND CHILD CARE

FIND A RESOURCE CENTER

Figure 2. The home page of https://www.michigan.gov/mikidsmatter provides just enough information to get users started. Links on the page prompt the user to find additional information.

Links

Guideline	Explanation	Instead of Using This	Do This
Use clear and concrete text for links	Avoid vague links that might lead the user to take actions they do not intend.	"Click here!"	Use clear language and action words that reflect the outcome of clicking the link: "Read more about the Hoover Dam," "Check out our photo gallery," or "Go to the next page." Use alt text or titles for links.
Use color carefully	Small differences between colors are often indistinguishable; color blind people cannot distinguish reds and greens (or other variations).	Color as the only differentiator between text and links. For example, "Read more on the Revolutionary War."	Make links stand out by using any combination of the following: noticeably different color, an underline, bold, or larger size font. Make sure to use at least a 3:1 contrast ratio with surrounding text. For example, "Read more on the Revolutionary War." See figure 3 for an example of adequate color and text contrast.



Figure 3. The "Families" page at https://www.mychildde.org/families/ uses clearly visible color and text contrast and interactive elements such as linked buttons.

Dynamic Content

Guideline	Explanation	Instead of Using This	Do This
Avoid automatic media and navigation	Avoid having audio or video start to play automatically, and avoid automatic navigation. These could confuse or alarm users.	Video or audio files that start playing as a new page is loaded or after the user spends a few seconds on a page	Provide users with clear options to start playing media and pause, stop, mute, or hide moving, blinking, playing, or scrolling content; provide "play, pause, stop" buttons or other clear signals for actions that the user needs to take.
Caption videos	Users who are deaf or hard of hearing may not be able to absorb the audio information in a video.	Video files that assume users can hear the audio	Add captions to your video for the benefit of users who are deaf or hard of hearing.
Provide audio descriptions	Users with low or no vision may not be able to absorb the visual information in a video.	Video files that assume users can see the video	Include audio descriptions for visual content that is not presented in the audio track, or provide a second user-selectable audio track that includes just the audio descriptions.

Tables

Guideline	Explanation	Instead of Using This	Do This
Displaying data	Displaying data inappropriately can confuse the meaning of the data or make it difficult to consume, especially if tables do not include proper tagging for assistive technologies.	Invisible tables for controlling layout, lists, spacing, or displaying anything other than tabular data	Use simply laid out tables to display tabular data that screen readers can recreate for users. Use well-formed HTML with tags for table headers and tags for table data. Use the scope attribute or the header or ID attribute to associate headers with data cells. Display tabular data only in tables.
Identify table captions	Most tables provide a caption at the bottom of the table, which means screen readers read it only after going through the table.	Captions that appear right below the table (for example, "Table 2. Annual Rainfall Averages per State")	Use the <caption> tag immediately inside the tag so that users who rely on screen readers can get the caption before going through data in the table. For example, <caption>Table 2. Annual Rainfall Averages per State</caption></caption>

Forms

Guideline	Explanation	Instead of Using This	Do This
Provide simple forms with clear instructions	Clear instructions improve your form's usability.	Complex forms that appear on the page without sufficient context	Design simple, easy-to-use forms. Identify required fields clearly. Help the user understand the purpose of the form; provide clear instructions; program error validation that provides instructions for solving the problem. See figure 4 for an example of an easy-to-follow form.
Each field is clearly labeled	Labels assigned to each form control allow users with low or no vision to associate the label with the appropriate form element.	Unlabeled form controls	Ensure that labels are associated with a form control. Use the <label> element to match a text label to each form control.</label>
Ensure forms are keyboard accessible	Users who access forms with only their keyboard need access to all form elements.	Forms that use JavaScript to determine form behavior	Ensure forms can be completed using only keyboard functions.

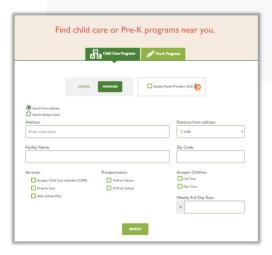


Figure 4. The provider search page at http://families.decal.ga.gov/ChildCare/Search is a good example of a simply laid-out form that is easy to understand.

Downloadable Files

Guideline	Explanation	Instead of Using This	Do This
Provide accessible files	Some file formats are more accessible than others.	Downloadable Excel or PowerPoint files, which are not accessible by nature	Use Microsoft (MS) Word or PDF files, which are potentially more accessible. Acrobat Reader is free, which removes the burden of purchasing MS Office. Both MS Office and Adobe Acrobat Pro have built-in accessibility checkers; run accessibility checks on every downloadable document and mitigate accessibility violations before providing these files as downloads.

Navigation

Guideline	Explanation	Instead of Using This	Do This
Keyboard-only navigation	Users who do not use the mouse can navigate websites using the "Tab" key and other keyboard commands.	Links that are organized under the assumption that users can navigate directly to any link on the page using a mouse	Design a website that can be navigated in a sequential way, making it easier for users to Tab through navigation links until the desired link is reached. See figure 5 for an example of an easily navigable layout.
Remove tabindex	Tabindex specifies an order for users to move through a page using the "Tab" key. It has ultimately proven to be counterproductive.	Tabindex values that guide manual navigation	Restructure your content so that navigation using the Tab key is more intuitive and linear.
Focus order	Focus order helps users navigate a page in an order that makes sense.	Unexpected reading order or no reading order	Provide a capability for keyboard users to navigate the page in a predefined sequence that preserves meaning.

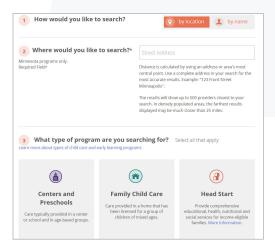


Figure 5. The search page at http://parentaware.org/search/ is easily navigable using keyboard strokes alone. The layout is clear and sequential.

ARIA Roles and Landmarks

Guideline	Explanation	Instead of Using This	Do This
Landmarks identify significant page areas	ARIA markup adds landmarks that help identify significant sections of the page and makes them more keyboard and screen reader navigable.	One long landmark area on the page or no ARIA markup at all	Break the page into distinct areas that are identified by the available landmark role attributes. Use HTML landmarks (for example, "Main"; "Nav"; "Footer") or ARIA landmarks (for example, role="search"; role="navigation"; role="banner") as appropriate. Consider the following example: A user with low vision accesses your site using a screen reader. This user might look for the "search" ARIA landmark to ensure that he or she is using the site search bar.

Additional Resources

The following resources provide more information on accessibility best practices:

- A11y with Lindsey. (2019). "4 things that I always manually test" [Blog post]. Retrieved from https://www.a11ywithlindsey.com/blog/4-things-always-manually-test/
- Bigby, G. (2019). "Top 25 awesome accessibility testing tools for websites" [Blog post]. DYNO Mapper. Retrieved from https://dynomapper.com/blog/27-accessibility-testing/246-top-25-awesome-accessibility-testing-tools-for-websites
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 https://www.w3.org/WAI/WCAG21/quickref/?versions=2.0¤tsidebar=%23col_customize&showtechniques=124#top
- W3C. (n.d.). "Web accessibility evaluation tools list" [Web page]. Retrieved from https://www.w3.org/WAI/ER/tools/?q=wcag-20-w3c-web-content-accessibility-guidelines-20
- W3C. (2018). "Web accessibility laws and policies" [Web page]. Retrieved from https://www.w3.org/WAI/policies/
- W3C. (2008). "Web content accessibility guidelines (WCAG) 2.0" [Web page]. Retrieved from https://www.w3.org/TR/WCAG20/





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